

LOUISIANA TECHNOLOGY INNOVATION FUND PROPOSAL

I PROJECT TITLE

Implementation of Statewide Learning Management System

II PROJECT LEADER

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III EXECUTIVE SUMMARY

In September 1997, Governor Foster announced his "Strategic Transition aimed at Accountability, Results and Services" (STARS) plan which called for government to be run more like a business by pressing for accountability, cost-saving results and responsiveness to the public. Two of the STARS five focus areas addressed better training of employees and better use of technology. Both of those objectives can be met by the implementation of a statewide Learning Management System (LMS) for the Comprehensive Public Training Program (CPTP).

An LMS is a software application that automates the administration, tracking, and reporting of classroom and online training events, enabling detailed analysis of the effectiveness of a training investment. LMS could also support the delivery of learning offline by providing automatic, online messaging to course participants, including the transmission of enrollment instructions and pre-work; by providing learners with collaborative tools, such as discussion forums and chat rooms; and by managing inventory of items such as CD-ROMs, manuals and books.

LMS would help to maximize the efficiency and effectiveness of state workforce by providing learners and/or supervisors with the ability to:

- ?? Search for available classes
- ?? Register, waitlist, or cancel from classes
- ?? Register and track individuals or groups through enrollment, cancellations, and class completion

LMS would provide the state the ability to manage a centralized learning program by providing the following features:

- ?? Perform routine administrative functions easily, using just a Web browser
- ?? Centralize all training administration, including fast registration processing, automatic correspondence, and customized reporting
- ?? Manage complete learner profiles including administration records, scores, completions, mastery, attempts, time, requirements
- ?? Track, manage, analyze, and report on any kind of statewide training

- ?? Set up blended curriculums and organize learners into groups based on training needs
- ?? Manage compliance and certification programs
- ?? Correspond with students via any standard e-mail system

The implementation of LMS will also expand the “classroom” to another dimension, because it would provide state government with the ability to

- ?? Access, manage, and track training delivered in a 'virtual classroom' over the Web
- ?? Integrate with leading vendors of Virtual Classroom systems, allowing the management of statewide training in one database

An LMS implementation would definitely facilitate the advancement of e-government initiatives in Louisiana.

IV DESCRIPTION OF THE PROJECT

A. Project Narrative

CPTP currently uses Registrar to record class requests, set up classes, register people for classes, maintain class attendance data, maintain confidential test scores, produce transcripts, and management reports. This data is maintained primarily on instructor led classes. Data is also kept on some video based courses that are offered. Data is kept on CBT courses, but only if the student requests that courses attendance credit be given. The Registrar administrators are all CPTP employees. Department CPTP coordinators distribute course information and submit class requests to CPTP for scheduling.

There is no automated input of transactions from other departments, nor from the Web based training (NETg) system. CPTP provides reports and text files to other departments who request training data on their employees.

Pathlore acquired Siltan-Bookman, the company who developed and licensed the Registrar software. Pathlore offers existing Registrar customers a significant discount on the purchase of its LMS product. There are other departments within state government who also maintain Registrar for their department-specific course offerings. The acquisition of the Pathlore LMS would allow consolidation of the various Registrar databases into one statewide repository (database) of all state employee training data. Such a level of centralization would provide more efficient training management as well as eliminate the current duplication of efforts and costs associated with maintaining departmental training systems.

Therefore, an LMS implementation would provide CPTP with the tools needed to expand its current mission of administering the state-funded training program offering management development, supervisory training and general application classes, and begin to align learning initiatives with business objectives.

While it will be an evolutionary process to implement total functionality of the Pathlore LMS, upon conclusion of this initiative CPTP will provide state departments with the ability to move into an e-learning environment. It is proposed the transition to such an environment will happen in the following stages:

- 1) Convert existing CPTP database to LMS and begin development of statewide standards
- 2) Exchange data with other state training databases and allow department training administrators access to LMS
- 3) Enable state employees to register themselves for classes and view training history
- 4) Consolidate training data for all state employees
- 5) Plan, deliver and manage all types of learning (online, instructor-led and virtual classrooms); track and evaluate learning,
- 6) Offer a full range of content from custom web-based courses to thousands of courses by leading content providers
- 7) Create web-based tests and assessments.

Staff of the Office of Information Services will participate in the implementation project by serving as the state's project manager and providing technical expertise. There will be some involvement by staff in the Office of Computing Services since the LMS software will reside on hardware under their control. Resources will be required from other state departments to act as subject matter experts for training requirements in their respective agencies and to assist with the development of statewide standards.

The technological platform for the Pathlore LMS is as follows:

- ?? The Learner Workstation - Microsoft Internet Explorer
- ?? Administrator Workstation/Client Tier - Microsoft Internet Explorer, Windows 2000, XP, or NT 4.0, Microsoft Word to create and print letters
- ?? Application Tier - Windows 2000 or NT 4.0, Microsoft Internet Information Server
- ?? Database Tier - Oracle or MS SQL Server
- ?? MAPI-compliant e-mail system - (e.g., MS Exchange, Lotus Notes, cc:Mail, etc.)

B. Use of Innovative Technology

The implementation of the Pathlore LMS will be a new application within state government of a proven technology. Relational databases are presently used for the majority of the statewide administrative systems. The LMS application is client/server based and leverages the power of the Internet to improve efficiency and serve the demanding and diversified e-Learning needs. What makes this an innovative application of technology is the deployment of a system that consolidates training data into one database for all of Louisiana state government, and provides skills assessment and individual development programs for state employees.

C. Multi-agency Application or Portability to Other Agencies

As indicated in other sections of this document, one major objective of this LMS project is to consolidate the various Registrar databases being utilized by different departments into one statewide repository (database) of all state employee training data. The cost of the initial purchase of LMS software will be based on the number of "seats" or users given access to the system through the Internet. CPTP, as LMS administrator, will distribute seats to the various state departments. The LMS project will be a collaborative initiative that is easily portable to other agencies.

D. Benchmarking Partners and/or Best Practice References

Minnesota Department of Human Services
Mary Britt
444 Lafayette Rd. N
St. Paul, MN 55155
mary.britt@state.mn.us
P. 651-297-5886
F. 651-297-5840

Minnesota DHS is using the Pathlore Learning Management System to plan, manage, and deliver all forms of learning for 30,000 employees. They are developing significant return on investment through reduced administrative costs associated with the management of enterprise training programs. Through the system, they are offering training in the areas of soft skills, technology, and internal processes. They have been using Pathlore products since 1994.

Missouri Office of the State Courts Administration
Gloria Thompson
2112 Industrial Drive
Jefferson City, MO 65110
gloria_thompson@osca.state.mo.us
P. 573-526-8317

Missouri OSCA is using the Pathlore Learning Management System to plan, manage, and deliver all forms of learning for 4,500 employees. They are developing significant return on investment by offering court employees access to training right at their desktop. This online training has significantly reduced costs associated training and travel. Through the system, they are offering training in the areas of soft skills, technology, and internal processes. They have been using Pathlore products since 2000.

Montana Department of Justice
Karen Nelson
303 North Roberts
Helena, MT 59620
knelson@state.mt.us
P. 406-444-9621
F. 406-444-4453

Montana DOJ is using the Pathlore Learning Management System to plan, manage, and deliver all forms of learning for 30,000 employees. They are developing significant return on investment by offering employees access to training right at their desktop. This online training has significantly reduced costs associated training and travel. The ability to track and report on employee certification is also significantly beneficial. Through LMS, they are offering training in the areas of soft skills, technology, and internal processes. They have been using Pathlore products since 2001.

Maricopa County
Barbara White
301 W. Jefferson
Suite 310
Phoenix, AZ 85003
bwhite@mail.maricopa.gov
P. 602-506-5203

Maricopa County DOJ is using the Pathlore Learning Management System to plan, manage, and deliver all forms of learning for 15,000 employees. They are developing significant return on investment by offering court employees access to training right at their desktop. This online training has significantly reduced costs associated with training and travel. The ability to track and report on employee certification is also significantly beneficial. Through e-learning, they are offering training in the areas of soft skills, technology, and internal processes. They have been using Pathlore products since 1995.

E. Long-range Planning

The two goals of CPTP's Strategic Plan are:

1. Lead state government efforts to provide effective training for state employees.
2. Work cooperatively with state agencies to ensure managerial and supervisory employees have the skills necessary to perform their jobs.

In order to expand CPTP's current role of administering the state-funded training program offering management development, supervisory training and general application classes and to begin aligning learning initiatives with business objectives and providing effective training, the implementation of a LMS is required. Once the total functionality of the Pathlore LMS is achieved, CPTP will provide state departments with the ability to move into an e-learning environment.

An e-learning environment will aid in maximizing employees' productivity by offering training anywhere, anytime. The availability of e-learning will reduce time and costs associated with employees (students and instructors) traveling to training locations, increase the convenience to employees and minimize productivity losses by enabling new employees to become productive more quickly. This initiative will allow the state to begin the transition to digital government.

F. Performance Goal

The primary objectives of this LMS project are to maximize the efficiency and effectiveness of the state workforce and to consolidate the various Registrar databases being utilized by different departments into one statewide repository (database) of all state employee training data. Because the project will impact all state departments, the measure of success and performance goals must be developed with input from the entire project team (comprised of consultant staff, CPTP staff, technical resources and subject matter experts representing the various departments). Therefore, the performance goals, indicator names and indicator values will be established during the project "kick off" as part of the project planning phase.

G. Technical Approach

1. Technical Description - Pathlore has integrated authoring, delivery, and student progress management in a single multimedia product. Pathlore LMS provides an open, online learning platform that manages all courses, registrations, students, certifications, results, and delivery methods across multiple sites. The components of this platform include: Microsoft Internet Explorer; Windows 2000, XP, or NT 4.0; Microsoft Word; Microsoft Internet Information Server; Oracle or MS SQL Server; and a MAPI-compliant e-mail system.

2. Interoperability - Pathlore uses standard database engines from Oracle, Microsoft, Sybase, and others to store, manage, and dynamically stream courses as reusable learning objects to desktops and student progress information back to servers.

3. Scalability – Pathlore LMS is designed for a high degree of scalability based on the number of “seats” (employees accessing the system). The database is designed to run on a high-level server that can be expanded as various phases of the project are deployed and demand and/or size of the user population increases. Other system components may be scaled up to meet increased demand for services by the implementation of additional application or web servers.

4. Maintenance - The reliance on industry standard state of the art software components provides an upgrade path to new software releases, which will enable the State to take advantage of future technology innovations.

H. Implementation Approach

Phase I: Install LMS, convert Registrar database to SQL database, import course management data from NETg database, develop standards to facilitate shared use of LMS by other state departments.

Phase II: Enhance LMS Access for Training Administrators to include all functions except create rights.

Phase III: Enhance LMS Access for Training Administrators to include all functions.

Phase IV: Rollout of Student Web Access for Individual Access

Phase V: Configuration of “Look and Feel” for up to (22) Agencies.

Phase VI: Integration with HRIS and ERP systems.

Phase VII: Managing Competencies, Skills and Gap Analysis

I. Assessment of Risks

The LMS implementation project may be impacted by the same risk factors associated with many technology projects including inadequate skills of technical staff, limited participation by staff of major departments acting as subject matter experts and software deployment complexity. This effort will require project staff with skill sets that are unique to learning management systems and e-learning development. Having the software vendor provide implementation services and training of staff to gain requisite skills will mitigate this risk.

Obtaining involvement of the Undersecretaries of the various departments will mitigate the risk of limited participation by departments. This effort will be coordinated by Angele Davis, the Division of Administration's Deputy Commissioner of Policy. The risk of overwhelming deployment complexity is mitigated by selecting a LMS that is web enabled and places minimal hardware, software, and network requirements on the end user.

One additional risk would involve state technical staff failing to take ownership of the DBA responsibilities associated with the LMS product. To reduce the potential of this occurring, OCS staff will participate on the project team.

J. Integration with Existing Technologies

Pathlore LMS, by design, integrates with existing Registrar databases and is designed to utilize the Division of Administration's existing infrastructure and standards for networking, application servers, database servers, web servers, operating systems, and database software. This will allow the system to be utilized by state departments and can be easily adapted to any future changes of statewide IT standards

K. Project Budget and Costs

Equipment

No initial cost to the project. Supported by the existing architecture of the Office of Computing Services.

Software

Cost Summary:

<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
LMS Licensing Fee for 500 seats	1	\$ 56,000	\$ 56,000
Credit (<i>Registrar system</i>)	1	(45,000)	(45,000)
Customer Care Plan	2	11,200	22,400

\$ 33,400

Telecommunications

No cost to the project. Supported by the existing architecture of the Office of Telecommunications.

Professional/Contracted Services

Project Consultant Contract

\$339,600

Cost Summary:

<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Phase I	680 hrs	\$320	\$217,600
Phase II	80 hrs	\$250	\$ 20,000
Phase III	40 hrs	\$250	\$ 10,000
Phase IV	64 hrs	\$250	\$ 16,000
Phase V	160 hrs	\$250	\$ 40,000
Phase VI	64 hrs	\$250	\$ 16,000
Phase VII	80 hrs	\$250	\$ 20,000

Other

Cost Summary:

\$ 13,000

<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
3 Training classes for 2 persons (including travel)	2	\$ 6,500	\$ 13,000

V FUNDING REQUESTED

<u>Funding Category</u>	<u>Total Cost</u>	<u>Other Sources</u>	<u>Funding Requested</u>
Professional Services	\$ 339,000		\$339,000
Software	\$ 33,400		\$ 34,000
Other (training)	\$ 13,000		\$ 13,000
Total	\$ 386,000		\$386,000

VI COST/BENEFIT ANALYSIS

CPTP through the Implementation of Statewide LMS Project expects to experience the following cost saving benefits from the implementation of the project:

1. Elimination of duplication of effort through centralization of employee training information
2. Improved employee efficiency by faster registration processing and automated notification
3. Increase in effectiveness of state workforce through improved availability of training
4. Reduction in travel by offering e-learning courses

VII. SIGNED STANDARD FORM

The information itemized in the Implementation of Statewide Learning Management System Project is accurate and complete. The Louisiana Division of Administration Comprehensive Public Training Program, with assistance from the Office of Information Services, will meet the reporting requirements outlined by the Louisiana Technology Innovations Council.

Whit Kling
Deputy Undersecretary Division of Administration

Date

Sam Breen
CPTP Administrator

Date

Sylvia Vaught
Office Information Systems Director

Date